

Fig. #1

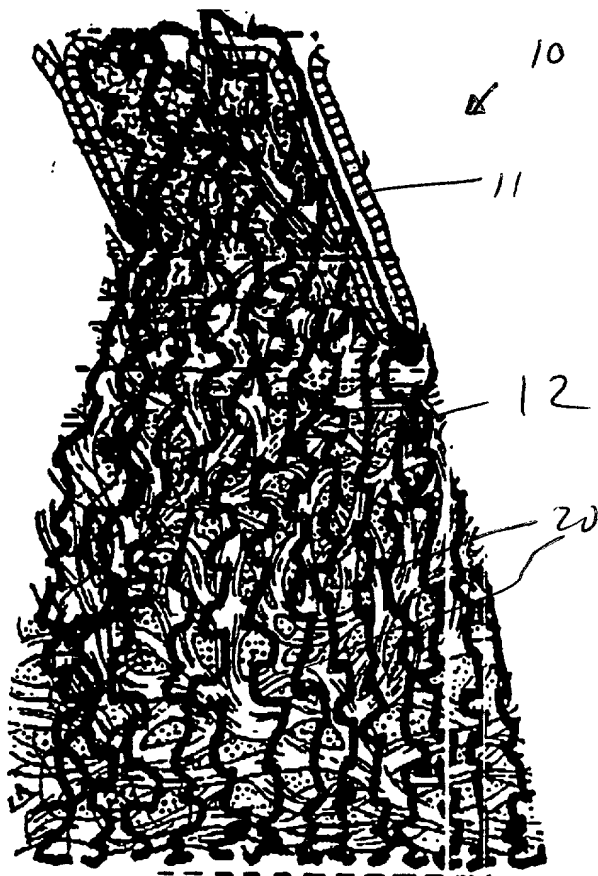


Fig. #2

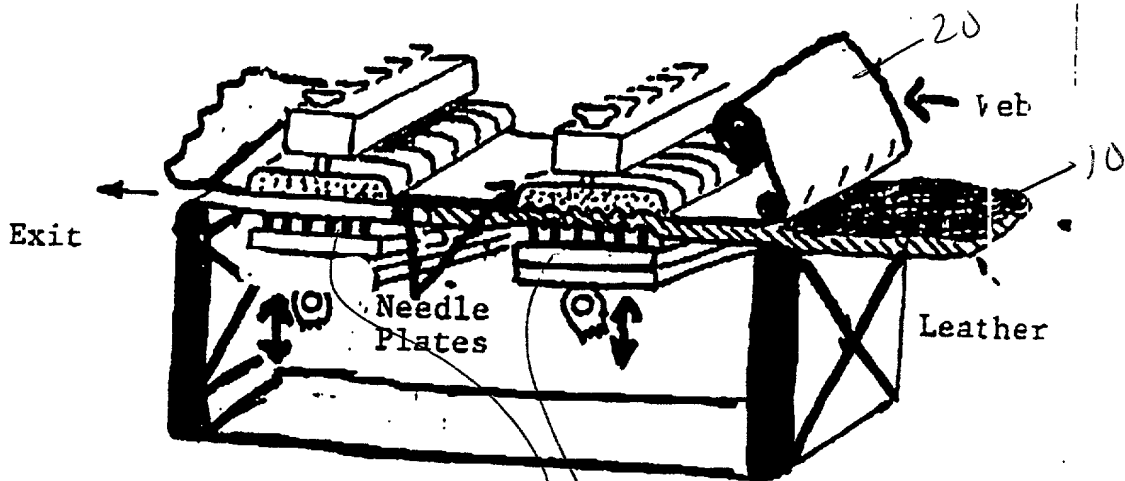


Fig. #3

100

110

Basic Needlepunch Process

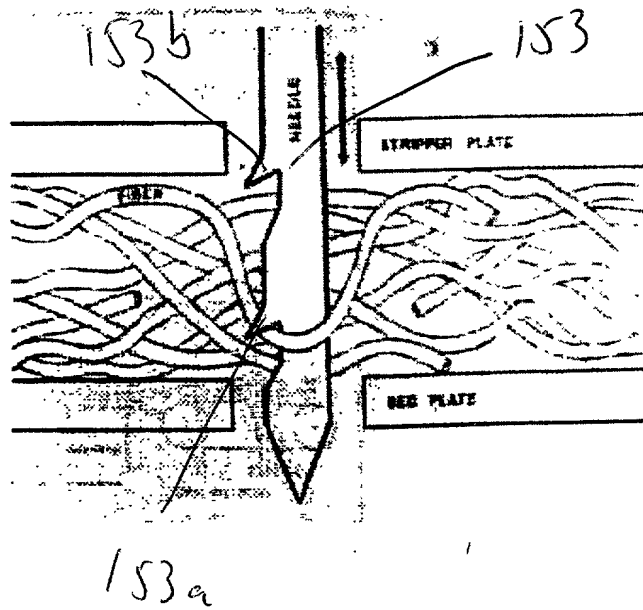


Fig. 4

153a 153b 153

Diagram illustrating a textile machine, likely a spinning or weaving loom, showing various components and their interactions:

- Main Drive**: The primary power source, connected to the Needle beam.
- Needle beam**: A horizontal beam supporting the Needle board and Needles.
- Needle board**: A board supporting the Needles.
- Needles**: The primary working elements, labeled 151, 152, and 153.
- Fiber batt**: The raw material being processed, entering from the left.
- Drawing off rollers**: Labeled 134 and 135, these rollers guide the fiber batt into the Needle Zone.
- Needle Zone**: The central area where the fiber is processed, containing Holeplates (154) and Needles (151, 152, 153).
- Drawing-in rollers**: Labeled 131 and 132, these rollers guide the fiber batt out of the Needle Zone.
- Leather**: Labeled 10, a strip of material used for guiding or supporting the fiber.
- Holeplates**: Labeled 154, these plates are part of the Needle Zone assembly.
- Support rollers**: Labeled 130, 131, and 132, these rollers support the fiber batt as it moves through the machine.
- Handwritten annotations**: Numbers 140, 150, and 151 are present, indicating specific parts or measurements.

Fig. 5